THERMAL PRINTING SOLUTIONS

A711 LOGOSOFT PRINTER
SKGGS010
SKGG1xxx & SKGG4 Series

USER MANUAL

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INTRODUCTION

The purpose of the manual is to describe how to use the A711 LOGO thermal printer.
It also provides you with important steps for using the printer safely and for preventing problems and malfunctions.

Please read this manual before using the printer.

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CONTENTS

1 GENERAL OVERVIEW 5

2 TECHNICAL SPECIFICATIONS 6

2.1 Summary of technical specifications 6

2.2 Physical specification 7
2.2.1 Dimensions 7
2.2.2 Print head specification 7
2.2.3 Power supply 7

2.3 Interface specifications 8

2.4 Environmental specifications 8
2.4.1 Environmental conditions 8
2.4.2 EMI, ESD, CE and FCC 8

2.5 Operational performance 8
2.5.1 Paper specification 8
2.5.2 Speed 8

3 SETTING UP YOUR PRINTER 9

3.1 Getting ready to use the printer 9
3.1.1 Unpacking the printer 9
3.1.2 Description of printer parts 10
3.1.3 Buttons 11
3.1.4 LED Indicator 11
3.1.5 Cutter 11
3.1.6 Connectors 11
3.1.7 Power transformer 11

3.2 Choosing the proper location for your printer 12

3.3 Loading paper 12
3.3.1 Loading the paper roll: 12
3.3.2 Loading Labels (with optional spindle): 13
3.3.3 Removing an Empty Paper/Label Roll 15

3.4 Light indicator 16

3.5 Connectors & cables 16
3.5.1 Power connector 16
3.5.2 Communications interface connectors 17
3.5.3 Drawer kick-out connector 20

3.6 Drivers 20

4 LIST OF CONTROL CODES 21

5 COMMAND DESCRIPTION 23

5.1 Printer configuration 23

5.2 Positioning commands 25

5.2.1 Vertical 25

5.2.2 Horizontal 26

5.3 Print characteristics commands 27

5.4 Font commands 32

5.5 Sensor commands 36

5.6 Graphics commands 36

5.7 Printer status commands 37

5.8 Bar code commands 38

5.9 Drawer kick-out commands 40

6 TROUBLE SHOOTING 41

6.1 Problems and solutions 41

6.2 Warranty 45

7 CLEANING YOUR PRINTER 46

7.1 Cleaning the printer 46

7.2 Cleaning the print head 47

8 SPARES 48

8.1 Papers **48**

8.2 Labels (as an option with spindle) **48**

1 GENERAL OVERVIEW

The SKGG printer better known as the LOGO printer is ideal for printing on paper rolls and if desired can also be used to print labels, when ordered with the optional spindle.

2 TECHNICAL SPECIFICATIONS

2.1 Summary of technical specifications

ITEM	VALUE	UNITS
Printing method	Direct thermal	-
Paper / label loading	Auto load	-
Number of resistor dots	448	-
Resolution	8 x 8	dots/mm
Printing width	56	mm
Printing speed	30	mm/s
Paper / label width	62	mm
Paper / label bucket diameter	80	mm
Data Buffer	4	kBytes
Out of paper / label detection	Opto sensor	-
Printer voltage range	20 - 30	V DC
Power consumption	24	VA
Power supply	110 or 220 (depending on country) 50 or 60 (depending on country)	V Hz
Maximum duty cycle (to avoid motor temperature rise) (max 2 sec “on”)	30 (dots "ON")	%
Storage temperature range	- 10 to 60	°C
Operating temperature range	5 to 40	°C
Operating humidity	35 to 85	°RH
Electrical life time	10^8	pulses
Mechanical life time (abrasion)	25	Km
Over all dimensions: Width Depth Height	103 190 141	mm mm mm
Weight (without paper roll)	645	g
Recommended paper	See chapter "Consumable parts"	-
Interface	RS 232 (38400 bauds max)	DB 9
Certification: EMI Safety	CE Class B, FCC Class B UL	-
Emulation	Subset of Epson TM	-

2.2 Physical specification

Model #: Printer SKGG1xxx and SKGG4xxx

Emulation: Subset of Epson TM
Paper handling: Straight; Entire path is accessible.
Power: Input: 30 VAC max @ no load,
20 VAC min @ 1 amp. Centre tap = 12 VAC

2.2.1 Dimensions

Width	141 mm
Depth	103 mm
Height	190 mm
Weight (w/o paper roll)	645 g

2.2.2 Print head specification

Model: Fixed 2.25" linear thermal head

Head life: 25 km of paper (using AXIOHM paper)
Print head is replaceable

Printing width:	56 mm
Number of dots across width:	448 dots
Resolution (dot-density):	8 x 8 dots/mm

2.2.3 Power supply

The printer requires a power supply of 20V at 1A minimum. Other voltages, which are required internally for the micro controller and the communications ports, are generated internally from the 20V supply.

Specification:

Output voltage: 20 V to 30 V
Output current: 50Hz to 60 Hz

Area	Axiohm power supply reference	Certification
North America	3105510	UL Listed (QQGQ or EPBU)
Europe	3105512	CE
United Kingdom	3101488	
Australia	3102859	

All connectors should be SELV types in order to meet safety standards (Safety extra low voltage).

The power supply cable is a disconnect device. The power supply main connector should be easily accessed to enable power disconnection.

2.3 Interface specifications

See chapter "Communications interface connectors".

2.4 Environmental specifications

2.4.1 Environmental conditions

Operating temperature:	5 to 40 °C
Humidity	35% to 85% RH (non-condensing)
Storage temperature:	-10 to 60 °C (except for paper)
Maximum humidity:	85 % RH (non-condensing)

2.4.2 EMI, ESD, CE and FCC

The printer is designed to meet the requirements of:

CE Class B
FCC Class B
UL

The print meets safety standards when used with Axiohm recommended power supply. The use of a different power supply equipment will require new safety certifications.

2.5 Operational performance

Method: Direct thermal
Fonts: Elite and pica

5 Bar codes:
- EAN-8
- EAN-13 (UPC-A)
- Code 39
- Interleaved 2 of 5
- CODABAR

2.5.1 Paper specification

Paper width	62 mm
Maximum paper roll diameter	80 mm
Recommended papers	See chapter "Consumable parts" for the complete list.

* You must contact Axiohm if you wish to use an alternative type of paper; otherwise your warranty might not be valid and you could cause damage to your printer.

2.5.2 Speed

30 mm per second
(for 1A equiv. to 30% dots « ON »)

3 SETTING UP YOUR PRINTER

3.1 Getting ready to use the printer

3.1.1 Unpacking the printer

The first step in setting up your printer is unpacking the pieces. Be sure to save all the original packing materials. They are specially designed to protect the printer and will make repackaging easy if you ever need to ship the printer.

Having unpacked your printer. You should find the following items (*figure 1-1*):

- One SKGG (Head 2.25") printer
- One Serial cable
- One Power transformer (standard outlet)
- One paper roll (or roll of labels if ordered)
- One User manual
- One spindle (if ordered)

Make sure that you have all of the above components or that none are damaged. If not, contact your dealer immediately. Report any deficiency to your supplier as soon as possible after receiving the printer.

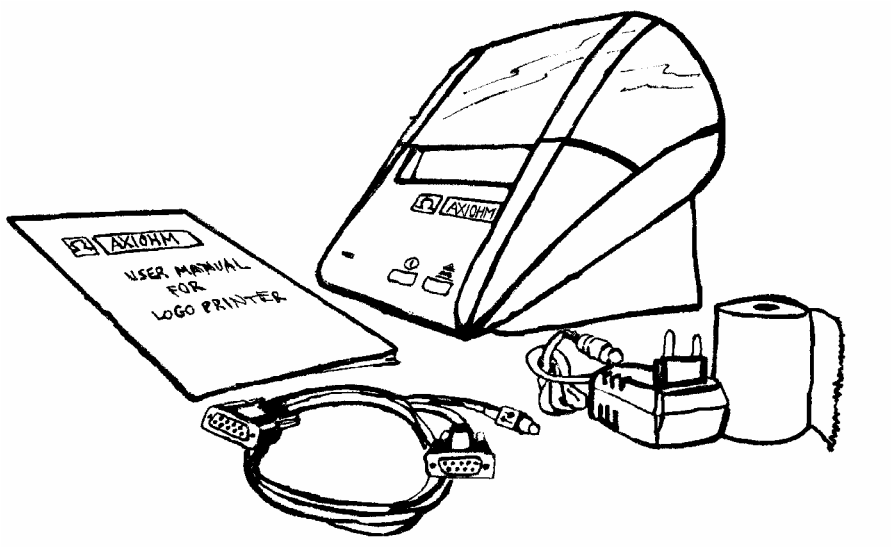


Figure 1-1: Equipped printer

The model number and serial number (including manufacturing week and batch number) of the printer will be marked on the exterior of the packaging.

3.1.2 Description of printer parts

Identifying the printer components:

Figures 1-2 and 1-3 highlight the main components of the printer.

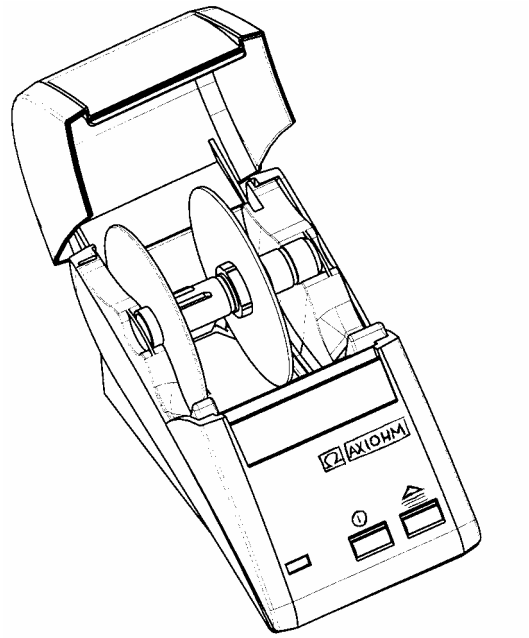


Figure 1-2: LOGO printer with optional spindle

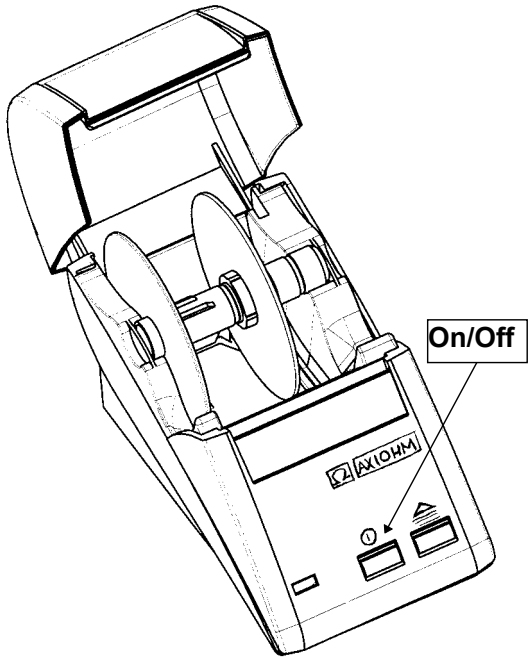


Figure 1-3: LOGO printer components

Printer controls: The printer controls allow you to turn the printer on and off and advance the label roll. Refer to figure 1-3 to locate the following printer controls on your printer.

Cover: The cover protects the internal components of the printer for dust, moisture and the outside world in general. The cover is easily opened when changing paper and label rolls.

Label spindle: The label spindle is used to support the roll of labels while operating. It is not required for the paper roll.

Drawer kick out: Which looks like a telephone jack, is a drawer kick out. (see code ESC p)

Power transformer: The power transformer provides electrical power to the printer. Connect the transformer to a standard outlet.

3.1.3 Buttons

On/off button: The on/off power button is the left button on the front panel of the printer. Once you have the power cord plugged in, push the On/Off button to turn the printer on, press it again to turn the printer off. (delays).

Paper feed button: The form feed button feeds the paper roll through or advances one label at a time when the button is pressed.

Form Feed Button: The form feed button is the right button on the front panel of the printer and advances the paper roll.

In listing mode: As long as you push this button the paper advances.

In label mode: For printing labels push this button once to advance the label roll one label, so the next set of three guide holes on the label roll aligns with the label tear bar. The label roll advances one label each time you press the form feed button.

3.1.4 LED Indicator

When the printer is on, the power light located on the front panel of the printer will glow green.
The light goes off when you turn the printer off..

3.1.5 Cutter

Tear bar: The serrated tear bar on the exit slot allows quick, clean paper or label removal.

3.1.6 Connectors

Power connector:

Double interface connector: The cable is equipped with a double interface connector, the DB9 female serial connector for a PC and the mini-din for the Macintosh. One end of the special cable that comes with the printer is plugged into the printer connector and the other end is attached to your computer.

Drawer kick-out connectors : which looks like a telephone jack, is a drawer kick out. (see code ESC p).

3.1.7 Power transformer

The power transformer provides electrical power to the printer. Connect the transformer to a standard outlet.

3.2 Choosing the proper location for your printer

Before setting up your printer, take a few moments to consider where you plan to put it.
There are a few general guidelines you might consider.

- Ensure that there is enough room around the printer to allow paper to flow out freely, and to ensure comfort while using your printer.

- Avoid placing the printer in areas where sudden, severe changes in temperature and humidity occur.

- Avoid areas with direct sunlight, dirty or dusty locations and grease.

- Select a steady source of electricity and check for other appliances which may be using the same circuit.

Copiers, heaters, air conditioners and other motorised equipment can cause power fluctuations which may interfere with you printing.

Note: Make sure to use a surge protector.

3.3 Loading paper

Both the paper roll and the roll of labels can be quickly and easily loaded into the printer.

3.3.1 Loading the paper roll:

1. Open the cover so that you have access to the interior of the printer. Remove any packing material.

2. Be certain that the power cord is connected. Now turn on the printer. The green power light will flash and you will hear the printer's motor turning as it looks for labels to feed.

3. Feed the free end of the roll into the feed slot on the inside of the printer. The paper roll is placed directly into the reservoir.

4. Push the end into the slot until you feel a slight resistance. Continue pushing gently. The feed motor will grab the end of the paper through the printer and out the exit slot, stopping automatically.

5. If the motor stops turning while you are still in the process of loading the paper, just press the form feed button to get it started again. (*To protect itself, the motor stops turning after a few seconds*.)

6. Tear off the paper coming out of the printer by grasping the end and pulling downward and sideways across the edge of the tear bar.

7. Close the cover. Your printer is ready to go !

3.3.2 Loading Labels (with optional spindle):

Refer to Figures 1-5 and 1-6.

1. Open the cover so that you have access to the interior of the printer. Remove any packing material.

2. Remove the label spindle by lifting it straight up from the label spindle holder. The spindle is used uniquely for printing labels.

3. Locate your free starter roll of labels and remove the tape from the end of the roll. **Cut the lead label in half** to create a nice straight edge.

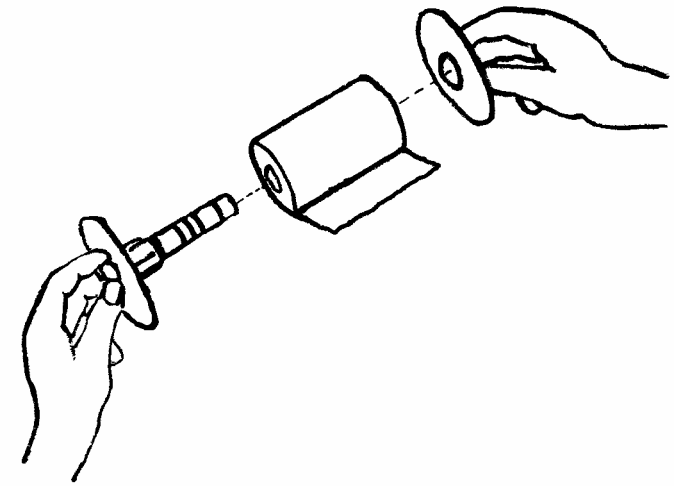


Figure 1-5: Loading narrow labels onto the label spindle.

   The printer grabs a straight edge much easier.

4. Refer to Figure 1-5 while following these instructions: For narrow labels, remove the right half of the label spindle and put the label on the label spindle so that the end feeds from the bottom of the roll. Reconnect the right half of the spindle with the label roll snugly secured between the circular plates of the spindle.

   If you're using wide labels, remove the right half of the label spindle and turn it around, so that the long end the spindle is on the inside. An illustration indicating how to position the spindle is moulded into the back plastic base inside printer. Put the labels on the label spindle so that the end feeds from the bottom of the roll.

   Reconnect the right half of the spindle, with the label roll snugly secured between the circular plates of the spindle.

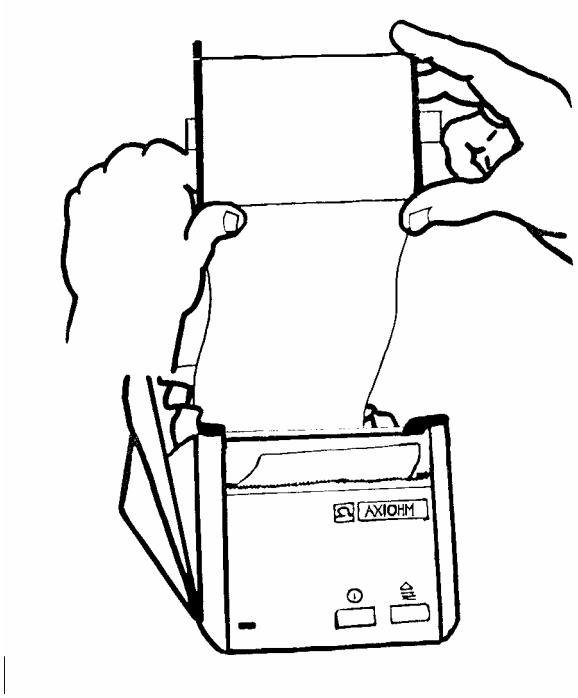


Figure 1-6: Inserting the label into the feed slot before placing the label roll into the printer.

5. Be certain that the power cord is connected. Now turn on the printer. The green power light will flash and you will hear the printer's motor turning as it looks for labels to feed.

6. While holding the spindle of labels in one hand, use your other hand to feed the free end of the roll into the feed slot on the inside of the printer as shown in Figure 1-6. (If it is easier, you can rest the label spindle on the top edge of the printer, freeing both hands to help with getting the label feeding started).

7. Push the end into the slot until you feel a slight resistance. Continue pushing gently. The label feed motor will grab the end and carry the labels through the printer and out the exit slot, stopping automatically at the end of the first label.

   If the motor stops turning while you are still in the process of loading labels, just press the form feed button to get it started again. (To protect itself, the motor stops turning after a few seconds)

8. Return the label roll spindle with the labels to the spindle holder. The spindle will settle into the raised shoulder slots in the printer. See Figure 1-7.

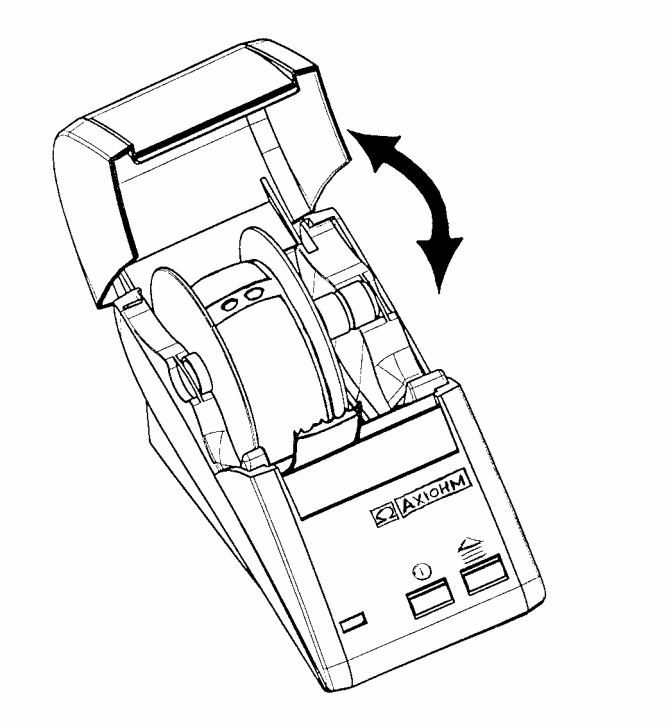


Figure 1-7: After the labels have been properly fed past the label tear bar, rest the label spindle holder and close the cover.

9. Tear off the labels coming out the front of the printer by grasping the end and pulling downward and sideways across the edge of the label tear bar.

10. Close the cover.

3.3.3 Removing an Empty Paper/Label Roll

When the printer runs out of paper or labels the power light will flash and you will need to remove the used roll. Follow these instructions to remove a used roll of labels.

1. Leave the printer turned on. Open the cover and use scissors to cut the labels between the label roll and the feed slot.

2. Press the form feed button on the printer's front panel and hold it in as the printer ejects the remaining labels or backing.

3. When the labels or backing stop, pull gently to remove the material from the printer. Now you can load a new roll of labels. See the loading label section earlier in this chapter for instructions on how to load labels.

***Note*:** When you switch on, you are in label mode by default.
If you use listing paper, you must change this mode:
- by software with function GS ; "L"; 0; 0
- or with the paper feed button.

If a hole is not detected (after 10cm) the printer will change to listing mode.

3.4 Light indicator

Power light: The power light glows green when the printer is turned on. It flashes when there is something wrong with the printer such as when the printer runs out of paper.

3.5 Connectors & cables

To reduce the electromagnetic emissions and susceptibility, all cables should be screened. If you are not using cables supplied by Axiohm for this purpose, please ensure that your cables match the printer and are rated at the appropriate voltage and current capacities.

***Use of an inappropriate cable may seriously damage your printer!**

3.5.1 Power connector

Connecting the power:

The power cord is connected to the rear of the printer as shown in Figure 1- 4.
Plug the power transformer into a standard outlet.

Supplying power to your printer

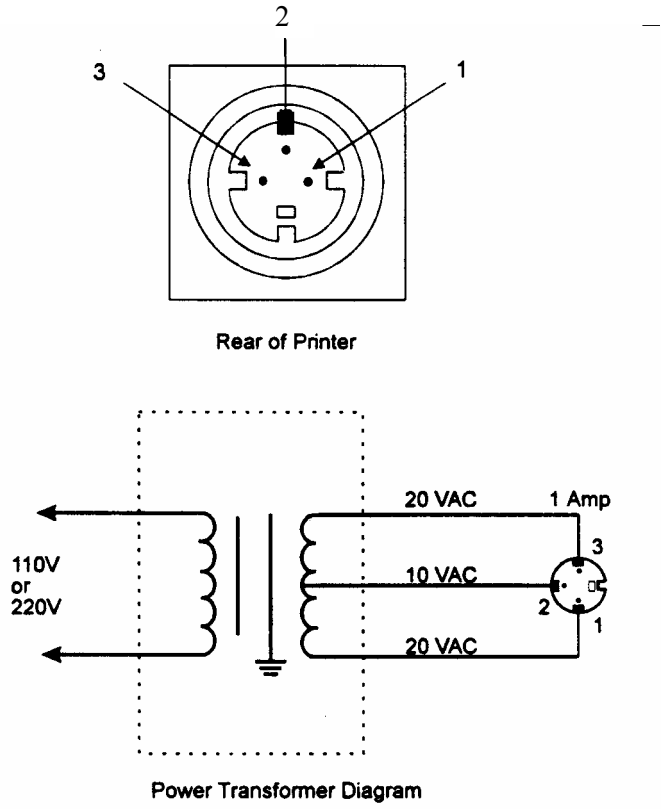


Figure 1-7 Power transformer diagram

Range for input power supply (US) : 110 V to 120 V / 50 Hz to 60 Hz
Range for output power : 20 V to 30 V / 50Hz to 60 Hz

3.5.2 Communications interface connectors

Serial interface Specifications:

This section describes the specification of the serial interface. See the chapter "*Setting up your printer*" for details about connecting you printer to your computer through the serial interface.

Type: Bi-directional, serial RS-232 using transmit, receive and ground

Protocol: Handshake DTR/DSR or XON/XOFF
9600 baud , 8 data bits, no parity, 1 start, 1 stop

The XON/XOFF Protocol:

The RS-232 serial interface communicates using the XON/XOFF protocol. This protocol helps to insure that your computer does not send information to the printer faster that it can print. The XON/XOFF protocol is popular data communications protocol. When the printer's buffer is within 20 characters of being filled, it sends the ASCII code XOFF (13 hex) to the computer to tell it to stop sending data. When there is again room for 50 characters in the buffer the printer sends the ASCII code XON (11 hex) to the computer to tell it to resume sending data. (XON is also known as DC1; XOFF is synonymous with DC3).

If the computer does not stop sending data within 20 characters after it receives an XOFF, the data that overfills the buffer will be lost and the printer will halt and flash an error message on its power LED.

The printer will send an XON code when it goes online to get things started. It will send an XOFF code to stop the computer from sending information if the input buffer is within 20 characters of being full. Pin functions are shown in Figure B-1.

Connecting the serial cable:

Your printer and computer communicate through the special serial cable that comes with your printer. The cable has one connector at one end and that connects to the printer and two connectors at the other end (one for PC and one for Macintosh) one of which connects to the serial port on the back of the computer. Use of the serial port enables you to continue using your parallel port for your regular document printer.

Follow the steps below while referring to Figure 1-4 to make the proper connections:

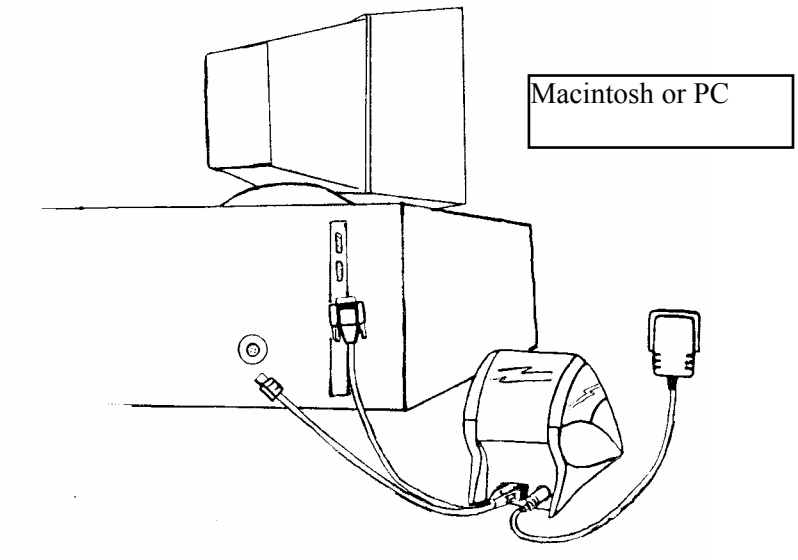


Figure 1-4 Serial cable connection

1-Turn your computer and printer off.

2- Connect the printer end of the serial cable to the rear of the printer (DB9 Female for a PC or mini-din for a Macintosh).

3- If you have a 9-pin serial port on the computer, attach the 9-pin connector; if you have a 8-pin serial port, attach a 8-pin connector. Secure the connector with the two screws. The connector you do not use can simply hang loose. It does not need to be connected and will not cause any damage to your computer or printer. See Figure 1-4.

4- Turn the computer on.

RS-232 Setting:

In order for the host computer to communicate with the printer, the communication parameters with the printer, the communication parameters must be:

Baud Rate:	9600
Data Bits:	8
Stop Bits:	1
Parity:	None

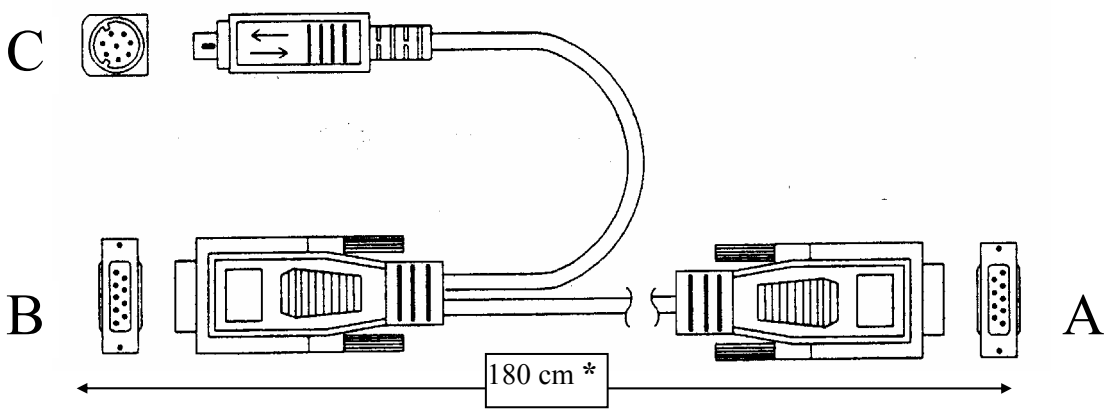
On a computer running DOS, use the MODE command to configure a serial port. To do this, type the following at the DOS prompt:

MODE COM 1 : 96 , N , 8 , 1 , P

Where COM 1 is the serial port you are using.
This could also be COM 2 or any valid comport.

Cabling:

The cable should be shielded between the shield of connectors A, B and C.



*** Maximum length, shielded cable**

Note:
The plastic used for cable must be **UL recognized.**

PINOUT:

	A	B	C
	1 NC	1 NC	1 NC
RXD	2	2	2 NC
TXD	3	3	3
DTR	4	4	4
Gnd	5	5	5
DSR	6	6	6 NC
RTS	7	7	7 NC
CTS	8	8	8
	9 NC	9 NC	

Figure 2-1 . Serial cable pin specifications and wiring chart

RS-232 Signal Levels

The serial interface uses standard RS-232 signal levels as shown in Table 2-1.

Signal level	Input	Output
MARK (1)	-27v to -5v	-5v
SPACE (0)	+5v to +27v	+12v

Table 2-1.RS-232 signal levels.

3.5.3 Drawer kick-out connector

The connector used to open a cash drawer and monitor, whether the drawer is opened or closed, is a RJ11 connector.

3.6 Drivers

The available driver versions are:

A711 Minidriver – Win 95/98/Me

A711 Minidriver – Win 00/XP

4 LIST OF CONTROL CODES

Escape codes

NAME	DESCRIPTION	LPRINT EXPRESSION
* HT	Horizontal Tab	CHR$(9);
* LF	Line Feed	CHR$(10);
* FF	Form Feed	CHR$(12);
* CR	Carriage Return	CHR$(13);
* SO	Set Enlarged Print	CHR$(14);
* DC4	Cancel Enlarged Print	CHR$(20);
ESC p	Drawer Kick out	CHR$(27); "p", CHR$(n);
ESC u	Status Drawer kick out	CHR£(27); "u";
* ESC-	Underlined Print Mode	CHR$(27); "-"; CHR$(n);
* ESC @	Printer Reset	CHR$(27); "@" ;
ESC J	Feed n Sublines	CHR$(27); "J"; CHR$(n);
ESC M	Elite Character Set	CHR$(27); "M";
ESC P	Pica Character Set	CHR$(27); "P";
ESC R	Select internat. Char. Set	CHR$(27); "R";CHR$(n);
* ESC W	Set Enlarged Print	CHR$(27); "W"; CHR$(n);
* ESC SO	Set Enlarged Print	CHR$(27); CHR$(14);
* ESC !	Set Print Mode type E	CHR$(27); "!"; CHR$(n)
* GS !	Set Print Mode	CHR$(29); "!"; CHR$(n);
GS&	Download Character Set	CHR$(29);"&"; CHR$(0); CHR(n); CHR$(0); CHR$(0); CHR$(d1); CHR$(dk);
GS *	Print Graphic Data	CHR$(29);"*"; CHR$(d1); CHR$(m);
GS A	Bar Code Start Position	CHR$(29);"A"; CHR$(n1); CHR$(n2);
GS B	Communications Settings	CHR$(29);"B"; CHR$(n);
GS D	First Printable Line	CHR$(29);"D"; CHR$(n);
* GS d	Print Buffer	CHR$(29);"d"; CHR$(n);
GS E	Top of Form	CHR$(29);"E";
GS h	Barcode Height	CHR$(29);"h"; CHR$(n);
GS k	Print Bar Code	CHR$(29);"k"; CHR$(n); CHR$(m);
GS H	Barcode text mode	CHR$(29); "H"; CHR$(n);
GS L	Set Label Length	CHR$(29);"L"; CHR$(n1); CHR$(n2);
GS N	Adjust Black Level	CHR$(29);"N"; CHR$(n);
GS O	Bar Code Orientation	CHR$(29);"O"; CHR$(n);
GS R	Get Firmware Version	CHR$(29);"R";
* GS S	Get Printer Status	CHR$(29);"S";

GS t	Set Characters per Line	CHR$(29);"t"; CHR$(n);
GS V	Set Portrait/Landscape Mode	CHR$(29);"V"; CHR$(n);
GS W	Horizontal Size of Bar Code	CHR$(29);"W"; CHR$(thin); CHR$(thick);
GS w	Horizontal Size of Bar Code	CHR$(29);"w"; CHR$(n);
* GS DC2	Set Double Height	CHR$(29); CHR$(18);
* GS DC3	Cancel Double Height	CHR$(29); CHR$(19);
* GS RS	Set Inverse Print	CHR$(29); CHR$(30);
* GS US	Cancel Inverse Print	CHR$(29); CHR$(31);

** code possible in landscape mode*

5 COMMAND DESCRIPTION

5.1 Printer configuration

GS B

NAME GS B Serial Communications setting

Expression CHR$(29);"B"; CHR$(n);

Function. Set serial communication values.

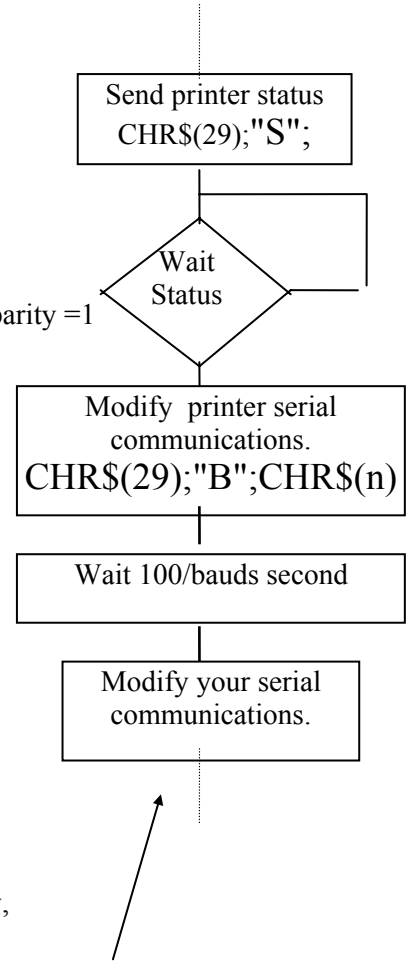
bit 7 = number of stopbits
0 = 1 bit
1 = 2 bit

bits 6 and 5 = number of data bit
10 = 7 bits
11 = 8 bits

bit 4 = (1) EVEN ,
(0) ODD (if parity =1

bit 3 = parity (0= OFF , 1= ON)

bit 2, 1 and 0 = baud rate
000 = 38,4 Kbaud
001 = 19,2 Kbaud
010 = 9600 baud
011 = 4800 baud
100 = 2400 baud
101 = 1200 baud
110 = 600 baud
111 = 300 baud



Example LPRINT CHR$(29);"B"; CHR$(2);

NOTE: On power up, the printer defaults to 9600 baud, no parity, 8 data bits, and 1 stop bit.

ATTENTION: Before sending this control code, ensure that the printer buffer is empty by using the method described above.

GS L

NAME	GS L	Set label length
Expression		CHR$(29);"L"; CHR$(n1); CHR$(n2);
Function.		Set label length or switch to continuous Feed Mode. n1*256+n2 = # dot lines from sense hole to centre hole for 3.5" label Default value =840. Max value =1500.Min value =296 **With L-D >115** **To switch into continuous feed mode, do :** **CHR$(29);"L"; CHR$(0); CHR$ (0)**
Example		Length = 520 dot lines = 65 mm LPRINT CHR$(29);"L"; CHR$(2);CHR$(8);

GS N

NAME	GS N	Adjust black level
Expression		CHR$(29);"N"; CHR$(n); with 40<n<110 / ligth grey<n<black
Function.		Adjusts black level. Default level is 100
Example		LPRINT CHR$(29);"N"; CHR$(60);

5.2 Positioning commands

5.2.1 Vertical

LF

NAME	LF	Line feed
Expression		CHR$(10);
Function		In portrait mode, all the data stored in the print buffer is printed out and then linefeed is carried out. In landscape mode, LF moves the line pointer to the next line , but does not print out until buffer is full or a FF is received. If no data precedes the LF code, only linefeed is performed. If a CR proceeds LF, LF is ignored.
Example		LPRINT CHR$(10);

FF

NAME	FF	Form Feed
Expression		CHR$(12);
Function		Advance paper to the next Top Of Form position. In label mode TOF is the beginning of the next label. In paper mode, form feed is inhibited.
Example		LPRINT CHR$(12);

CR

NAME	CR	Carriage return
Expression		CHR$(13);
Function		When this code is input, the data stored in the print buffer is printed out then linefeed is carried out.
Example		LPRINT CHR$(13);

ESC J

NAME ESC J Feed n sublines

Expression CHR$(27);"J"; CHR$(n); n<256

Function. Feed n sublines (n/203 inch or n/8 mm).
This code causes the printer to print the data in the print buffer and executes n/203 inch paper feed.

Example LPRINT CHR$(27);"J"; CHR$(20);

GS d

NAME GS d Print buffer

Expression CHR$(29);"d"; CHR$(n);

Function. Prints buffer line and feed n lines.

Example LPRINT CHR$(29);"d"; CHR$(5);

GS E

NAME GS E Top of Form

Expression CHR$(29);"E";

Function. Form feed paper to the next Top of Form position.
In label mode TOF is the beginning of the next label.
In paper mode, form feed is inhibited.

Example LPRINT CHR$(29);"E";

5.2.2 Horizontal

HT

NAME HT Horizontal TAB

Expression CHR$(9)

Function This code carries out the horizontal TAB to the next TAB position. TAB is set every 8 characters. It does not operate when in landscape mode (GS V1).

Example LPRINT CHR$(9);

5.3 Print characteristics commands

SO

NAME	SO	Enlarged print
Expression		CHR$(14);
		Function When the SO code is input, all data that follows this code on the same is printed out in enlarged characters. This code is cancelled by the input of a DC4 or ESC W code.
Example		LPRINT CHR$(14);

DC4

NAME	DC4	Enlarged print mode cancel
Expression		CHR$(20);
Function		Cancels Enlarged print mode.
Example		LPRINT CHR$(20);

ESC-

NAME	ESC-	Underlined Print Mode
Expression		CHR$(27);"-";CHR$(n); n=1 or 49 : Sets underlined print mode n=0 or 48 : Cancels underlined print mode
Function		Set/cancel underlined print mode.
Example		LPRINT CHR$(27);"-";CHR$(1);

ESC@

NAME	ESC@	Printer reset
Expression		CHR$(27);"@";
Function		When this code is input, the printer is initialised, i.e. the same status as when the printer is turned on, causing all the data in the print buffer to be cleared. IMPORTANT : Initialisation causes all interval variables to be reset and a status bit 4 ->1. You must send « printer status » and wait for the status byte to be received before sending additional characters.
Example		LPRINT CHR$(27);"@"; LINPUT STATUS$

ESC W

NAME ESC W Enlarged mode

Expression CHR$(27);"W"; CHR$(n);
n=1 or 49 : Sets Enlarged print mode
n=0 or 48 : Cancels Enlarged print mode

Function. When ESC W is input, all data that follows this code on the same line is printed out in enlarged characters. This code is cancelled by linefeed or by the input of a DC4 or ESC W code. Same as SO.

Example LPRINT CHR$(27);"W";CHR$(49);

ESC SO

NAME ESC SO Set Enlarged print

Expression CHR$(27); CHR$(14);

Function. Set enlarged print mode. Same as SO code.

Example LPRINT CHR$(27); CHR$(14);

ESC !

NAME ESC ! Print Mode type E

Expression CHR$(27);"!"; CHR$(n);

Function. Set print mode.
n= mode

n value :

bit	0	1
0	Elite	Pica
1	NC	NC
2	NC	NC
3	NC	NC
4	Norm H	Dble H
5	Norm W	Dble W
6	NC	NC
7	und off	underlined

Default mode n=0

Example LPRINT CHR$(27); "!"; CHR$(129);

GS !

NAME GS ! Print Mode

Expression CHR$(29);"!"; CHR$(n);

Function. Set print mode.
n= mode

n value :

bit	0	1
0	Elite	Pica
1	und off	underlined
2	Norm Vid	Inv Video
3	NC	NC
4	Norm H	Dble H
5	Norm W	Dble W
6	NC	NC
7	NC	NC

Default mode n=0

Example LPRINT CHR$(29); "!"; CHR$(33);

GS t

NAME GS t Number of characters per line, Landscape

Expression CHR$(29);"t "; CHR$(n);

Function. Selects a number of characters per line in landscape mode (1= <n< =55)

Example LPRINT CHR$(29);"t";CHR$(47);

NOTE : must be executed before entering Landscape Mode (GS V)

GS V

NAME GS V Portrait / Landscape Mode

Expression CHR$(29);"V "; CHR$(n);
n=0 portrait
n=1 landscape

Function. Changes printer orientation to portrait or landscape
(sideways) mode. switch into landscape, do :
CHR$(29);"V"; CHR$(1);
To switch into portrait mode, so :
CHR$(29);"V"; CHR$(0);

Default is portrait

Example LPRINT CHR$(29); "V"; CHR$ (1);
FOR LINE =1 to 17
LPRINT "Side Writing"
NEXT LINE

NOTE : before issuing this command , the number of characters per line should be set using the command "GS t".
In landscape mode, you can use only code controle marked with « * »

GS DC2

NAME GS DC2 Double Height Character Set

Expression CHR$(29); CHR$(18);

Function. Sets double height character size

Example LPRINT CHR$(29); CHR$(18);

GS DC3

NAME GS DC3 Cancel Double Height Character Set

Expression CHR$(29); CHR$(19);

Function. Cancel double height character size

Example LPRINT CHR$(29); CHR$(19);

GS RS

NAME	GS RS	Inverse Video Mode
Expression		CHR$(29); CHR$(30);
Function.		Sets Inverse Video Mod
Example		LPRINT CHR$(29); CHR$(30);

GS US

NAME	GS US	Cancel Inverse Video
Expression		CHR$(29); CHR$(31);
Function.		Cancel inverse video mode
Example		LPRINT CHR$(29); CHR$(31);

5.4 Font commands

Printable characters

By sending the appropriate byte of data, given in the following tables in decimal and hexadecimal, the corresponding character will be printed (Table 1 for SKGG1xxx and Table 2 for SKGG4xxx).

Table 1: Printer Model SKGG1xxx

The characters printed correspond to page 0 of the international characters set.

Ch	Dec	Hex	Ch	Dec	Hex	Ch	Dec	Hex	Ch	Dec	Hex	Ch	Dec	Hex	Ch	Dec	Hex	Ch	Dec	Hex
SP	32	20	@	64	40	`	96	60	Ç	128	80	à	160	A0	└	192	C0	α	224	E0
!	33	21	A	65	41	a	97	61	ü	129	81	í	161	A1	┴	193	C1	ß	225	E1
ô	34	22	B	66	42	b	98	62	é	130	82	ó	162	A2	┬	194	C2	Γ	226	E2
#	35	23	C	67	43	c	99	63	â	131	83	·ú	163	A3	├	195	C3	π	227	E3
$	36	24	D	68	44	d	100	64	ä	132	84	ñ	164	A4	─	196	C4	Σ	228	E4
%	37	25	E	69	45	e	101	65	à	133	85	Ñ	165	A5	┼	197	C5	σ	229	E5
&	38	26	F	70	46	f	102	66	å	134	86	ª	166	A6	╞	198	C6	µ	230	E6
Æ	39	27	G	71	47	g	103	67	ç	135	87	º	167	A7	╟	199	C7	τ	231	E7
(	40	28	H	72	48	h	104	68	ê	136	88	¿	168	A8	╚	200	C8	Φ	232	E8
)	41	29	I	73	49	i	105	69	ë	137	89	⌐	169	A9	╔	201	C9	Θ	233	E9
*	42	2A	J	74	4A	j	106	6A	è	138	8A	¬	170	AA	╩	202	CA	Ω	234	EA
+	43	2B	K	75	4B	k	107	6B	ï	139	8B	1/2	171	AB	╦	203	CB	δ	235	EB
,	44	2C	L	76	4C	l	108	6C	î	140	8C	1/4	172	AC	╠	204	CC	∞	236	EC
û	45	2D	M	77	4D	m	109	6D	ì	141	8D	í	173	AD	═	205	CD	φ	237	ED
.	46	2E	N	78	4E	n	110	6E	Ä	142	8E	«	174	AE	╬	206	CE	ε	238	EE
/	47	2F	O	79	4F	o	111	6F	Å	143	8F	»	175	AF	╧	207	CF	∩	239	EF
0	48	30	P	80	50	p	112	70	É	144	90	░	176	B0	╨	208	D0	≡	240	F0
1	49	31	Q	81	51	q	113	71	æ	145	91	▒	177	B1	╤	209	D1	±	241	F1
2	50	32	R	82	52	r	114	72	Æ	146	92	▓	178	B2	╥	210	D2	≥	242	F2
3	51	33	S	83	53	s	115	73	ô	147	93	│	179	B3	╙	211	D3	≤	243	F3
4	52	34	T	84	54	t	116	74	ö	148	94	┤	180	B4	╘	212	D4	⌠	244	F4
5	53	35	U	85	55	u	117	75	ò	149	95	╡	181	B5	╒	213	D5	⌡	245	F5
6	54	36	V	86	56	v	118	76	û	150	96	╢	182	B6	╓	214	D6	÷	246	F6
7	55	37	W	87	57	w	119	77	ù	151	97	╖	183	B7	╫	215	D7	≈	247	F7
8	56	38	X	88	58	x	120	78	ÿ	152	98	╕	184	B8	╪	216	D8	°	248	F8
9	57	39	Y	89	59	y	121	79	Ö	153	99	╣	185	B9	┘	217	D9	·	249	F9
:	58	3A	Z	90	5A	z	122	7A	Ü	154	9A	║	186	BA	┌	218	DA	·	250	FA
;	59	3B	[	91	5B	{	123	7B	¢	155	9B	╗	187	BB	▉	219	DB	√	251	FB
<	60	3C	\	92	5C	|	124	7C	£	156	9C	╝	188	BC	▄	220	DC	ⁿ	252	FC
=	61	3D	]	93	5D	}	125	7D	¥	157	9D	╜	189	BD	▌	221	DD	²	253	FD
>	62	3E	^	94	5E	~	126	7E	Pts	158	9E	╛	190	BE	▐	222	DE	■	254	FE
?	63	3F	_	95	5F	SP	127	7F	*f*	159	9F	┐	191	BF	▀	223	DF		255	FF

Table 2: Printer Model SKGG4xxx

Ch	Dec	Hex	Ch	Dec	Hex	Ch	Dec	Hex	Ch	Dec	Hex	Ch	Dec	Hex	Ch	Dec	Hex	Ch	Dec	Hex
	32	20	@	64	40	‘	96	60		128	80		160	A0	À	192	C0	à	224	E0
!	33	21	A	65	41	a	97	61	ü	129	81	¡	161	A1	Á	193	C1	á	225	E1
¨	34	22	B	66	42	b	98	62	é	130	82	¢	162	A2	Ä	194	C2	â	226	E2
#	35	23	C	67	43	c	99	63	â	131	83	£	163	A3	Ã	195	C3	ã	227	E3
$	36	24	D	68	44	d	100	64		132	84	¤	164	A4	Ä	196	C4	ä	228	E4
%	37	25	E	69	45	e	101	65	à	133	85	¥	165	A5	Å	197	C5	å	229	E5
&	38	26	F	70	46	f	102	66		134	86	¦	166	A6	Æ	198	C6	æ	230	E6
'	39	27	G	71	47	g	103	67	ç	135	87	§	167	A7	Ç	199	C7	ç	231	E7
(	40	28	H	72	48	h	104	68	ê	136	88	¨	168	A8	È	200	C8	è	232	E8
)	41	29	I	73	49	i	105	69	ë	137	89	©	169	A9	É	201	C9	é	233	E9
*	42	2A	J	74	4A	j	106	6A	è	138	8A	ª	170	AA	Ê	202	CA	ê	234	EA
+	43	2B	K	75	4B	k	107	6B	ï	139	8B	«	171	AB	Ë	203	CB	ë	235	EB
,	44	2C	L	76	4C	l	108	6C	î	140	8C	¬	172	AC	Ì	204	CC	ì	236	EC
-	45	2D	M	77	4D	m	109	6D		141	8D	-	173	AD	Í	205	CD	í	237	ED
·	46	2E	N	78	4E	n	110	6E		142	8E	®	174	AE	Î	206	CE	î	238	EE
/	47	2F	O	79	4F	o	111	6F		143	8F	¯	175	AF	Ï	207	CF	ï	239	EF
0	48	30	P	80	50	p	112	70		144	90	°	176	B0	Đ	208	D0	ð	240	F0
1	49	31	Q	81	51	q	113	71	ô	145	91	±	177	B1	Ñ	209	D1	ñ	241	F1
2	50	32	R	82	52	r	114	72		146	92	²	178	B2	Ò	210	D2	ò	242	F2
3	51	33	S	83	53	s	115	73		147	93	³	179	B3	Ô	211	D3	ó	243	F3
4	52	34	T	84	54	t	116	74	û	148	94	´	180	B4	Ô	212	D4	ô	244	F4
5	53	35	U	85	55	u	117	75	ù	149	95	µ	181	B5	Õ	213	D5	õ	245	F5
6	54	36	V	86	56	v	118	76		150	96	¶	182	B6	Ö	214	D6	ö	246	F6
7	55	37	W	87	57	w	119	77		151	97	·	183	B7	×	215	D7	÷	247	F7
8	56	38	X	88	58	x	120	78		152	98	¸	184	B8	Ø	216	D8	ø	248	F8
9	57	39	Y	89	59	y	121	79		153	99	¹	185	B9	Ù	217	D9	ù	249	F9
:	58	3A	Z	90	5A	Z	122	7A		154	9A	º	186	BA	Ú	218	DA	ú	250	FA
;	59	3B	[	91	5B	{	123	7B		155	9B	»	187	BB	Û	219	DB	û	251	FB
<	60	3C	\	92	5C	|	124	7C		156	9C	¼	188	BC	Ü	220	DC	ü	252	FC
=	61	3D	]	93	5D	}	125	7D		157	9D	½	189	BD	Ý	221	DD	ý	253	FD
>	62	3E	^	94	5E	~	126	7E		158	9E	¾	190	BE	þ	222	DE	þ	254	FE
?	63	3F	_	95	5F	▒	127	7F		159	9F	¿	191	BF	ß	223	DF	ÿ	255	FF

Character Font

On the printer you can print 2 different fonts ELITE and PICA. These can both be achieved with SKGGX1XXX and SKGG4XXX.

The initial configuration of your printer is in PICA font but can be changed to ELITE using Escape code ESC M (See appendix 4).

See (on pages following) the character tables corresponding to style & model:

Table 1 : PICA character set for SKGG1XXX.
Table 2 : ELITE character set for SKGG1XXX
Table 3 : PICA character set for SKGG4XXX
Table 4 : ELITE character set for SKGG4XXX

ESC M

NAME	ESC M	Elite Character Set
Expression		CHR$(27);"M";
Function.		Set elite-sized character (16x24 char. set).
Example		LPRINT CHR$(27);"M";

ESC P

NAME	ESC P	Pica Character Set
Expression		CHR$(27);"P";
Function.		Set pica-sized character (12 x 24 char. set).
Example		LPRINT CHR$(27);"P";

ESC R

NAME ESC R Select international character set

Expression CHR$(27);"R"; CHR$(n) n =< 10

Function. Modifies the set of printable character in accordance with the table below.

		Ascii Character Code											
		23h	24h	40h	5Bh	5Ch	5Dh	5Eh	60h	7Bh	7Ch	7Dh	7Eh
n	Country	35	36	64	91	92	93	94	96	123	124	125	126
0	U.S.A.	#	$	@	[	\	]	^	`	{	|	}	~
1	France	#	$	à	•	ç	§	^	`	é	ù	è	¨
2	Germany	#	$	§	Ä	Ö	Ü	^	`	ä	ö	ü	ß
3	UK.	£	$	@	[	\	]	^	`	{	|	}	~
4	Denmark I	#	$	@	Æ	Ø	Å	^	`	æ	ø	å	~
5	Sweden	#	¤	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü
6	Italy	#	$	@	•	\	é	^	ù	à	ò	è	ì
7	Spain	Pt	$	@	¡	Ñ	¿	^	`	¨	ñ	}	~
8	Japan	#	$	@	[	¥	]	^	`	{	|	}	~
9	Norway	#	¤	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
10	Denmark II	#	$	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü

Example LPRINT CHR$(27);"R"; CHR$(1);

GS &

NAME GS & Download Character Set

Expression CHR$(29);"&"; CHR$(0); CHR$(n); CHR$(0);
CHR$(0); CHR$(d1);.....; CHR$(dk);

Function. Download character ASCII number n with d1 to dk
8 bit bitmap value (32=<n<=255).

k=48 for16x24 and 12x24 char set

Example LPRINT CHR$(29); "&";
CHR$(0); CHR$(n); CHR$(0);
CHR$(0); CHR$(d1);.....; CHR$(d48);

5.5 Sensor commands

GS D

NAME	GS D	First printable line
Expression		CHR$(29);"D"; CHR$(n);
Function.		Length (in dots) from hole detection to first printable line (default d = 185).**With 130 < n <255 & L-D >115**
Example		LPRINT CHR$(29);"D"; CHR$(185);

5.6 Graphics commands

GS *

NAME	GS *	Prints Graphic Data
Expression		CHR$(29);"*"; CHR$(d1);.....; CHR$(dm);
Function.		Print a graphic line. d1 to dm are 8 bit bitmap data to be printed. m=56
Example		LPRINT CHR$(29);"*"; CHR$(d1);.....; CHR$(d56);

5.7 Printer status commands

GS R

NAME GS R Send printer software version

Expression CHR$(29);"R";

Function. Makes the printer transmit the software version number.
Return 10 characters.

Example
```
LPRINT CHR$(29);"R";
LINPUT VERSION$   (ex: VER:   1.4S )
```

GS S

NAME GS S Printer Status

Expression CHR$(29);"S";

Function. Transmit printer status.
Printer returns status byte :

bit	0	ready (i.e paper in, no jam)
	1	tof (Top of Form)
	2	size (0 =1" , 1=2.25")
	3	label (1) listing (0)
	4	configuration loss (*)
	5	no paper
	6	unused
	7	error

(*) When you turn On or when you reset, this bit is set to1 . After the first printer status this bit is set to 0. If this bit returns to1 during printing configuration has been lost.

Example
```
LPRINT CHR$(29);"S";
LINPUT STATUS$
```

5.8 Bar code commands

GS A

NAME GS A — Starting position of bar code

Expression — CHR$(29);"A"; CHR$(n1); CHR$(n2);

Function. — Selects X position of bar code.
0<X<320 (X=n1*256+n2)

Example — LPRINT CHR$(29);"A"; CHR$(0); CHR$(120);

GS h

NAME GS h — Height of Bar Code

Expression — CHR$(29);"h"; CHR$(n);

Function. — Select height of bar code.
n=height in dotlines (1<=,255)

Example — LPRINT CHR$(29);"h"; CHR$(120);

GS k

NAME GS k — Select Bar Code

Expression — CHR$(29);"k"; CHR$(n); CHR$(m);
CHR$(d);.....; CHR$(dm);

Function. — Select a bar code system and prints the bar code.

n=0	
n=1	
n=2	EAN 13(UPC)
n=3	EAN 8
n=4	CODE A39
n=5	
n=6	CODABAR, MONARCH
n=7	2/5 Interleaved
n=8	CODE 128 Type A
n=9	CODE 128 Type B
n=10	CODE 128 Type C

m = numbers of characters to be encoded

Example — LPRINT CHR$(29);"k"; CHR$(6);CHR$(5);
CHR$(d);.....;CHR$(d5);

GS H

NAME Barcode Text Mode

Expression CHR$(29) ; H ; CHR$ (n)

Function Selects autotext under Barcode
n = 0 no text under Barcode
n = 2 text under Barcode

Exampe LPRINT CHR$(29) ;'H' ; CHR$ (2) ;

GS O

NAME GS O Bar Code Orientation

Expression CHR$(29);"O"; CHR$(n);

Function. Orientation of bar code.
n=0 vertical bars
n=1 horizontal bars

Example LPRINT CHR$(29);"O"; CHR$(0);

GSW

NAME GS W Horizontal Size of bar Code

Expression CHR$(29);"W"; CHR$(thin); CHR$(thick);

Function. Selects horizontal size of bar code.
thin = thickness of thin bars
thick = thickness of thick bars

Example LPRINT CHR$(29);"W"; CHR$(2); CHR$(3);

GS w

NAME GS w Horizontal Size of bar Code

Expression CHR$(29);"w"; CHR$(n);

Function. Selects horizontal size of bar code.
n = thickness of thin line in dots
thick line is always n*2 dots **n<=4**
If n=1, than the thin bars will be 1 dot in thickness and thick bars will be 2 dots

Example LPRINT CHR$(29);"w"; CHR$(2);

5.9 Drawer kick-out commands

ESC p

NAME ESC p Cash drawer control

Expression CHR$(27);"p"; CHR$(m); CHR$(n1); CHR$(n2);

Function. Generate a pulse on pin of drawer kickout connector in accordance with the table below:

m = 0 => pin2 & m=1 => pin5
n1 x 2ms is the on time of the pulse
n2 x 2ms is the off time of the pulse
0<n1=<n2=<255

Example LPRINT CHR$(27);"p"; CHR$(1);CHR$(105);
CHR$(152);

ESC u

NAME ESC u transmit Cash drawer status

Expression CHR$(27);"u"; CHR$(0);

Function. The printer return a single byte. If the return byte is even (0), the drawer is closed. If the return byte is odd (1), the drawer is open.

Example LPRINT CHR$(27);"u"; CHR$(0);
LINPUT STATUS_DRAWER$

6 TROUBLE SHOOTING

Since the LOGO printer is extremely reliable and intuitive, there's an excellent chance you'll never have to look in this section. However, if you do find yourself in need of advice for troubleshooting, use this section.

Generally, check to see if the printer cable is properly connected. Refer to the chapter "*Setting up your printer*" and your computer's documentation if you need help.

Axiohm printers are simple and generally trouble-free, but from time to time minor problems may occur. Follow these procedures to determine the cause and resolution of any problems the printer may be having. If the procedures in this section do not correct the problem, contact a service representative.

6.1 Problems and solutions

Clearing paper and label jams

If you experience jams with paper or labels, take the following steps.

1- Open the printer's cover and use scissors to cut the label or paper between the feed slot and the roll.

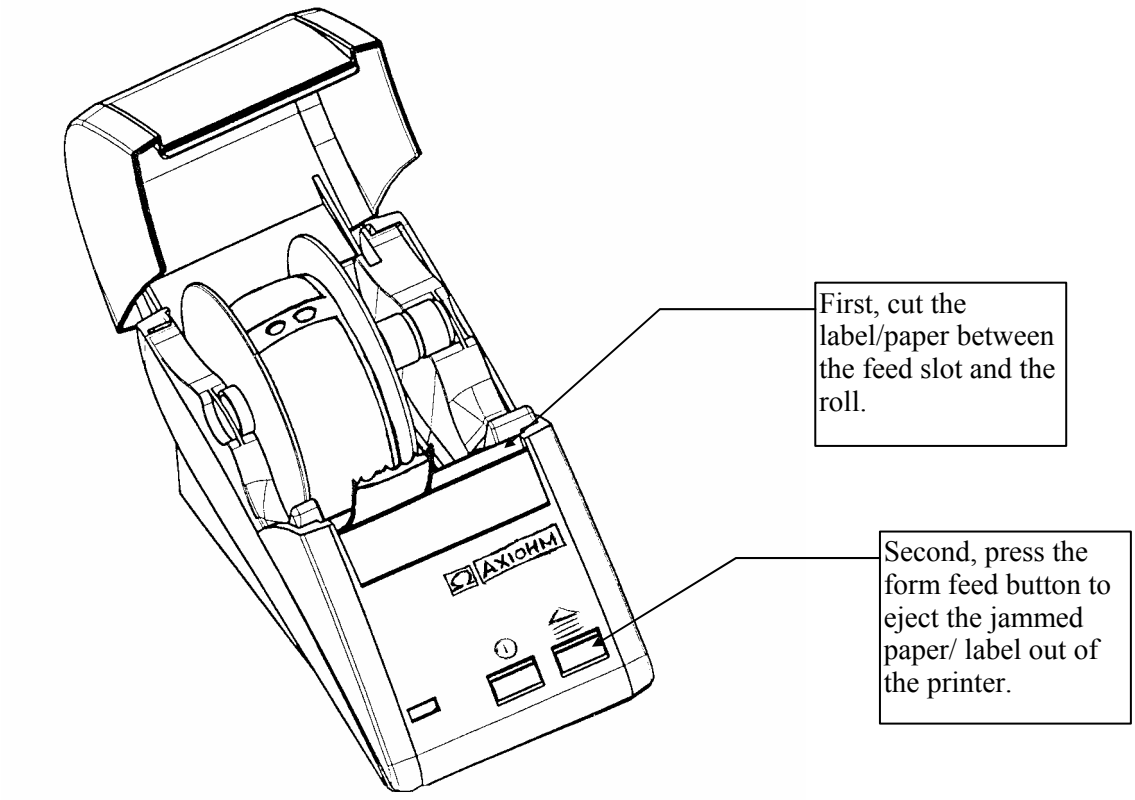

First, cut the label/paper between the feed slot and the roll.
Second, press the form feed button to eject the jammed paper/ label out of the printer.
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Figure A-1 Clearing label jams

2- Press the form feed button to advance the paper or labels through the printer. Reload the paper/labels as described in the chapter *"Setting up your printer"*.

If paper or labels will not come out with the form feed button, remove the label spindle from the printer. Pull the jammed label gently back out of the printer through the feed slot.

Trouble Shooting

Since the LOGO printer is extremely reliable and intuitive, there's an excellent chance you'll never have to look in this section. However, if you do find yourself in
need of advice for troubleshooting, use this section.

Check to see if the printer cable is properly connected. Refer to the chapter *"Setting up your printer"* and your computer's documentation if you need help.

Check the power to the printer

Ensure that the printer is turned on. The on/off light glows green when the printer is turned on. Check the power connection at the wall and at the printer if pressing the on/off button does not turn the printer on. If the printer still will not turn on, plug another machine into the outlet to be certain the outlet is functional.

If another machine proves that the outlet is good, you probably have a defective power transformer. Contact your dealer for a replacement. If the printer is on but will not print, perform a printer self-test.

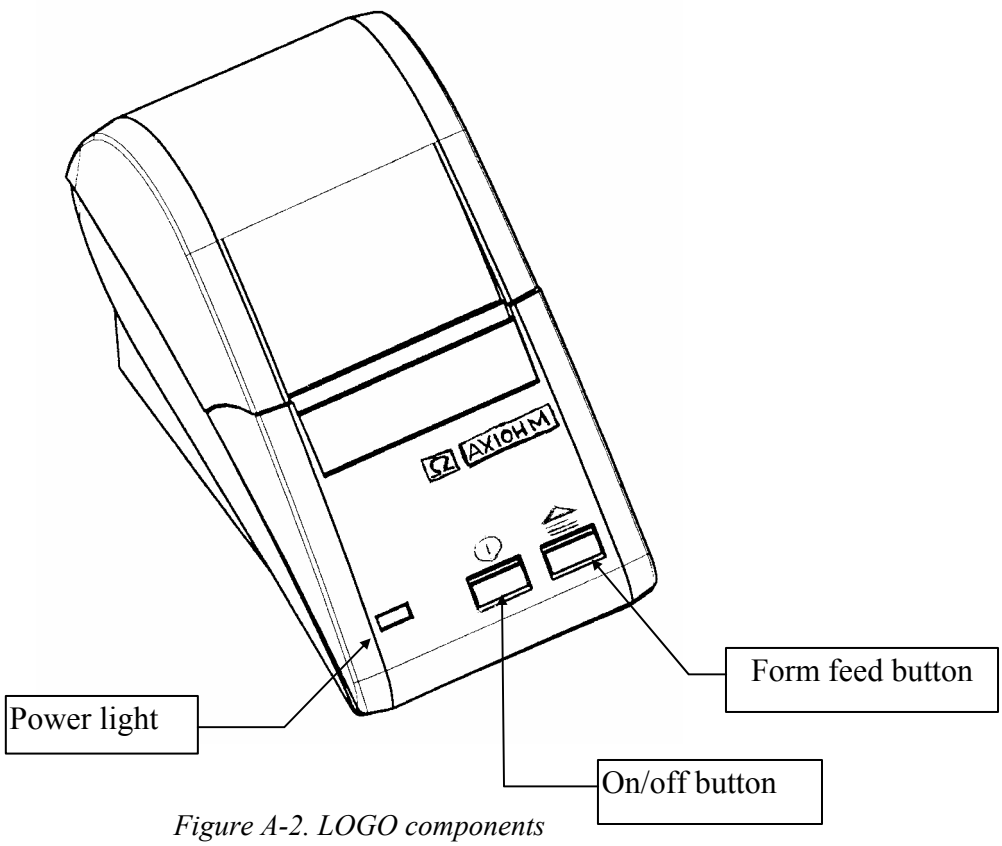


Figure A-2. LOGO components

To be certain that your printer is working (printing and feeding) properly, you can run a self-test by doing the following:

1- If a paper or label roll is not already loaded, load a roll as described in the chapter *"Setting up your printer"*.

2- Be certain that the printer is off , that the power cord is connected and that the printer cable is not connected to the printer.

3- Locate the form feed button on the front right of the printer.

4- Press the form feed button and *hold it down* as you turn the printer on. This will cause the printer to print a self-test.

5- End the self test by turning the printer off.

6- Reconnect the printer cable to the printer and turn the printer back on before you print again.

Check the labels

If the printer fails the self test, check to see if the paper or labels are loaded improperly or if the printer cable is plugged in (it should not be during the self test). Reload and retry the self test.

If the on/off button is flashing and labels or paper are loaded, inspect the the printer to look for jammed, damaged or crimped paper. Reload the according to the instructions.

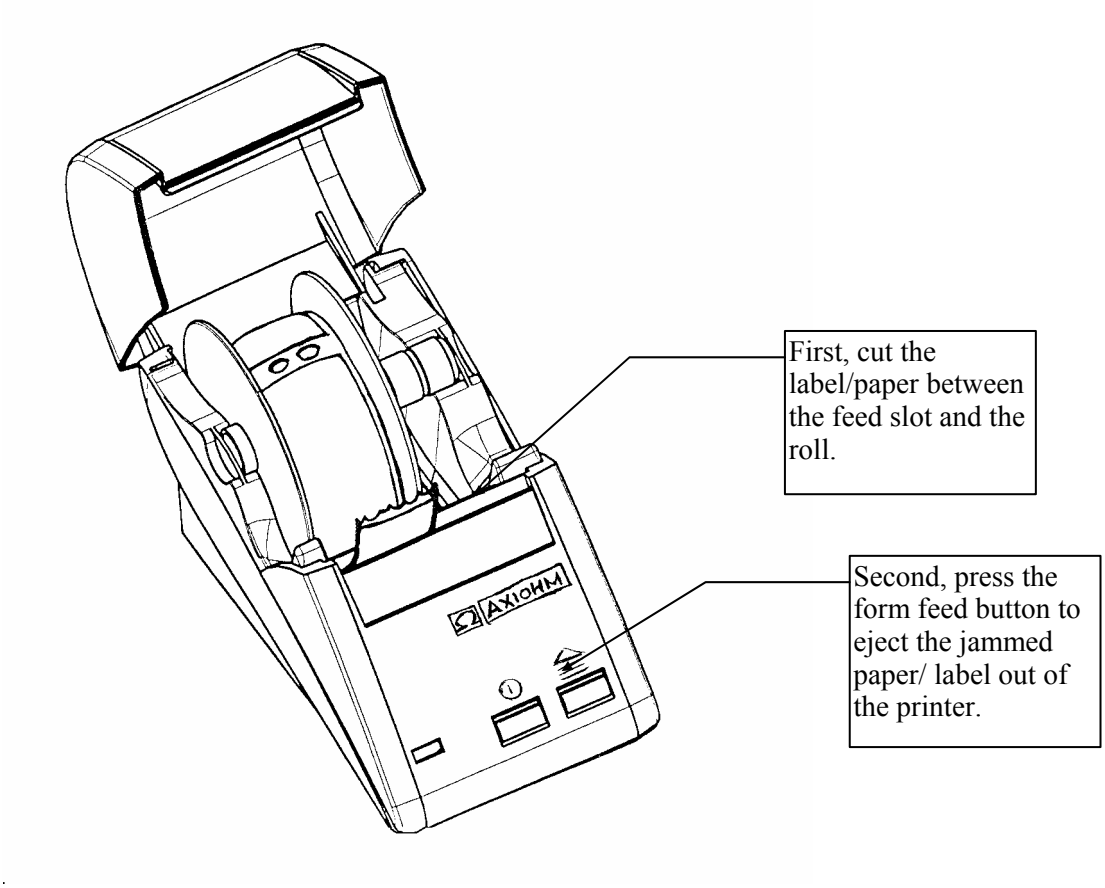
The on/off light will also flash when the printer comes to the end of a roll. Unload a new roll of paper or labels and the light should stop flashing.

If the print quality is poor, the print head might be temporarily misaligned . Unload and reload the paper and try printing again.

Check the connection

If the self test is successful but the printer still will not print, then do the following :

Check to be sure you have selected the correct serial port in the Setup Menu. Confirm that your serial port is set to 9600 Baud, no parity, 8 data bits, 1 stop bit.


First, cut the label/paper between the feed slot and the roll.
Second, press the form feed button to eject the jammed paper/ label out of the printer.
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6.2 Warranty

The printers or spare parts are guaranteed for a period of twelve (12) months, beginning at the delivery date (ex-works).

The printers are guaranteed against defective material and/or workmanship. The warranty covers only, and at AXIOHM's choice, the cost of repair or replacement by AXIOHM in its factory, after restitution by the customer of the printers or spare parts confirmed by AXIOHM to be defective (*excluding assembling, dismounting, shipping and other expenses)*.

The implementation of the warranty will not extend the warranty period.

Due to the complexity of the electronic and mechanical techniques used in the operation of such a printer, AXIOHM does not warranty problems resulting from an installation not according to the published specifications.

This warranty is subject to strict compliance with AXIOHM's technical instructions for installation, use and maintenance.

In particular, this warranty will not be valid for any defects due to:

- Use of thermal paper other than those recommended by AXIOHM.
- Incorrect maintenance.
- Defective installation or modification not approved by AXIOHM.
- Non-compliance, during any period, with the specified working conditions including the electrical power supply specifications.
- Abnormal wear or mechanical damage, including dot burning due to power overloads.
- Transportation in packaging other than the type of carton / foam insert in which the printer was originally packed.
- Any transportation, storage or setting up which does not comply with the technical specifications given to the customer by AXIOHM, or its official distributor, will invalidate this warranty.

In no event shall AXIOHM assume any liability in excess of that defined above. It is agreed that AXIOHM will not be liable for any indemnity for accidents to persons, damage to property or for loss of earnings.

7 CLEANING YOUR PRINTER

The printer is designed to provide the user with a long and trouble free service requiring very little maintenance.

You willll get the best possible performance from your printer if you follow the instructions in the chapter "*Setting up your printer*" and the procedure described here.

To clean your LOGO printer you will need these simple items:

- lint free cloth
- isopropyl alcohol, diluted dishwashing detergent or diluted (non-ammonia) glass cleaner
- small, soft brush, such as paint brush

Use these items as described in the maintenance procedures below.

Before cleaning, unplug all electrical connections.

7.1 Cleaning the printer

Cleaning the outside of your printer is as important as cleaning the inside.

Dusting the outside of the printer occasionally will reduce the incidence of foreign matter getting inside the printer.

Exterior Maintenance

Follow these steps to perform exterior maintenance of your printer:

1-Turn the printer off and disconnect the power cord.

2-Foreign matter, such as dirt, dust and ink, will more than likely be attracted to the exterior of your printer.

Use a lint free cloth to wipe the exterior of the printer.

Remove dirt and ink smudges with either isopropyl alcohol, diluted dishwashing detergent or diluted glass cleaner.

Avoid products containing ammonia for cleaning the printer of plastic cover.

3-Take a minute to clean the work area around the printer.

4-Reconnect the power cord and turn the printer on.

Interior Maintenance

The printer's top cover will keep out most of the dust and dirt, which accumulates in operating areas. However, it is still necessary to perform some basic interior maintenance periodically:

1- Turn the printer off and disconnect the power cord.

2- Open the top cover and remove the roll of paper or label to clean underneath.

3- Use a small, soft paint brush to whisk paper dust or other stray particles away from the inside of the printer.

4- Close the top cover.

5- Reconnect the power cord and turn the printer on.

7.2 Cleaning the print head

Depending of the environment in which the printer is used, the print head may accumulate dust.
Therefore it is necessary to clean it periodically in order to maintain a good print quality.
The cleaning period depends on the environment and the usage of the printer, but it should be cleaned at least once a year or up to once a month in heavy-duty applications.
The print head should always be cleaned immediately if the print becomes visibly fainter due to contamination of the print head.
To clean the print head:

Switch the printer off.
Never clean the head immediately after printing, it may still be hot.
Open the cover of the printer and remove the roll of paper.
Clean the heating dots of the head with a cotton stick and a little alcohol solvent (ethanol, methanol or IPA), but **do not touch the print head with you fingers!**
Allow the solvent to dry
Reload the paper and close the cover

8 SPARES

COMSUMABLE PARTS

Available through Axiohm distributors.

Your printer uses specially designed thermal labels and paper in a variety of sizes and quantities that can be purchased from computer dealers in bulk packs.

Warning: The AXIOHM warranty will not apply to defects resulting from use of material other than that listed below.

8.1 Papers

2325737	**PAPIER THER. 62MMX100M SENSIBILITE N** Continuous thermal paper roll 2 1/10" x 300 ft per roll

8.2 Labels (as an option with spindle)

2326048	**THERMAL LABEL (ADRESSE 30251TEN)** White address / 1 1/8" x 3 1/2" / 130 per roll/2 rolls
2326049	**THERMAL LABEL (ADRESSE 30252TEN)** White address / 1 1/8" x 3 1/2" / 350 per roll/2 rolls
2326050	**THERMAL LABEL (2 ADRESSES 30253TEN)** White address / 1 1/8" x 3 1/2" / 2-up.700 per rolls
2326053	**THERMAL LABEL (EXPEDITION 30256TEN)** White shipping / 2 1/8" x 4" / 300 per roll
2326054	**THERMAL LABEL** White 3.5" Disk / 2 1/8" x 2 3/4" / 100 per roll/2 rolls
2326055	**THERMAL LABEL (DISQUE.3.5" 30258TEN)** White 3.5" Disk / 2 1/8" x 2 3/4" / 400 per roll
2326056	**THERMAL LABEL (VHS VIDEOTR.30260TEN** VHS Video Spine / 3/4" x 5 7/8" / 200 per roll/2 rolls
2326057	**THERMAL LABEL VHS VIDEO/FA.30261TEN** VHS Video Top / 1 13/16" x 3 1/16" / 300 per roll
3102215	**THERMAL LABEL 2"25X1"25 (Lot de 5X1000)**